## SHARED VARIABLE GAIN AMPLIFIER FOR WDM CHANNEL EQUALIZATION

## Abstract of the Disclosure

An amplification architecture for WDM receiver systems. The WDM channel grid is divided into groups of adjacent channels. A separate optical amplifier is provided for each channel with a single pump being shared among the channels of each group.

The gain experienced by channels of a given group may be adjusted by varying the power of the group's pump. This approach allows equalization of received channel power such that all channels fall within the desired dynamic range. The amplification architecture may be implemented in a space-efficient manner at low cost.

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